



**SECTION 08 87 00 – GLAZING SURFACE FILMS
CREATIVEFX™ CUSTOM WINDOW FILMS**

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GUIDE SPECIFICATIONS:

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DELETE ALL "SPECIFIER NOTES" WHEN EDITING THIS SECTION.

PART 1 - GENERAL

1.1 CONDITIONS AND REQUIREMENTS

A. The General Conditions, Supplementary Conditions, and Division 01 – General Requirements apply.

1.2 SECTION INCLUDES

A. CreativeFX™ Custom Window Films.

1.3 RELATED SECTIONS

- A. Section 08 40 00 – Entrances, Storefronts, and Curtain Walls.
- B. Section 08 50 00 – Windows.
- C. Section 08 80 00 – Glazing.

1.4 REFERENCES

- A. Reference Standards
 - 1. American Association of Textile Chemists and Colorists (AATCC):
 - a. AATCC 8: Colorfastness to Crocking: AATCC Crockmeter Method.
 - 2. American Society for Testing and Materials International (ASTM):
 - a. ASTM E84: Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 3. Finat Test Methods (FTM):
 - a. FTM 1: Peel Adhesion (180 degrees) Test Equipment.
 - b. FTM 8: Resistance to Shear from a Standard Surface.
 - c. FTM 14: Dimensional Stability.
 - 4. International Building Code (IBC) compliant.
 - 5. National Fire Protection Association (NFPA) compliant.

6. Restriction of Hazardous Substances (RoHS) Directive compliant.

1.5 SUBMITTALS

- A. Product Data: Submit manufacturer's printed product literature, installations instructions, specifications, and data sheet.
- B. Shop Drawings: Submit show drawings showing layout, product components and dimensions.

SPECIFIER NOTES: DELETE SAMPLE REQUIREMENTS IF NOT REQUIRED FOR THIS PROJECT.

- C. Manufacturer's Samples: Submit samples of specified color and pattern.

1.6 QUALITY ASSURANCE

- A. Obtain all products in this section from a single Manufacturer with a minimum of 12 years' experience.

1.7 STORAGE AND HANDLING

- A. Packing: CreativeFX™ Custom Window Films are packaged in a box. Do not open the window films until ready to install.
- B. Storage and Protection:
 1. Avoid high temperature, low temperature, and humidity. Adhere to the manufacturer's guidelines and recommendations for condition limits.
 2. Ensure it is not exposed to direct sunlight.
 3. Ensure it is not exposed to fluorescent light at close range.
 4. Avoid contact with water, chemicals, and shock.

1.8 WARRANTY

- A. Manufacturer's Warranty: Provide the manufacturer's standard limited warranty in effect at the date of purchase.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Specified Manufacturer: CreativeFX™ Custom Window Films – A Product of Source One Digital. 1137 N. Gateway Blvd. Norton Shores, MI. 49441. Telephone: 800-898-3022. Web: www.customwindowfilms.com. Email: info@customwindowfilms.com

SPECIFIER NOTES: DELETE ONE OF THE FOLLOWING TWO PARAGRAPHS.

- B. Substitutions: Not Permitted.
- C. Requests for approved substitutions will be considered in accordance with provisions specified in Section 01 62 00 – Product Options.

2.2 CREATIVEFX™ CUSTOM WINDOW FILMS DESCRIPTION

- A. CreativeFX™ Custom Window Films: CreativeFX™ Custom Window Films offers the opportunity for complete transformation and customization of any flat glass in your interior environment. CreativeFX™ Custom Window Films are completely optically clear films that can be printed in an unlimited array of colors, frosts, patterns, gradients and more. CreativeFX™ Custom Window Films can translate your vision into reality. Whether your goals are privacy, branding, decorative, or all the above, CreativeFX™ Custom Window Films is here to help you through every step of the process. Your environment. Your vision. Your way.

2.3 CREATIVEFX™ CUSTOM WINDOW FILMS DESIGN CRITERIA

- A. Frosted and Privacy Looks: A timeless choice for interiors, this effect mimics the look of frosted glass without the added expense. By using varying levels of white or black ink, the film will provide just the right amount of privacy for your space.
- B. High Impact Colors and Branding: Striking, full-color designs are a bold, stylish way to enhance your space or add branding. From opaque to transparent, using your inspiration and our different ink layering techniques, together we can create a completely unique environment.
- C. Double-Sided Photographic Effects: Vibrant, colorful graphics with an inner layer of white ink, are visible in reverse, full color on both sides of the glass. This provides multiple audiences the same captivating and powerful views.
- D. Benefits:
 - 1. Scratch resistant.
 - 2. Optical Clarity.
 - 3. UV Blocking.
 - 4. Excellent adhesion.
 - 5. High temperature resistant.
 - 6. High humidity resistant.
 - 7. Chemical resistant.
 - 8. High resolution imaging.
 - 9. Liner designed to ensure adhesive smoothness and preserve optical clarity.
- E. Typical Applications:

SPECIFIER NOTES: CREATIVEFX™ CUSTOM WINDOW FILMS ARE FOR INDOOR USE ONLY.

- 1. Architectural window decorations.
- 2. Glass and plastic displays.
- 3. Glass walls and glass wall partitions.
- 4. Flat glass interior environment.
- 5. Window graphics.
- 6. Labels.
- 7. Decals.

2.4 CREATIVEFX™ CUSTOM WINDOW FILMS MATERIALS

- A. CreativeFX™ Custom Window Films:
 - 1. Material:
 - a. Top Coating: Coated with UV NPL ultra clear high performance permanent acrylic adhesive.
 - b. Scratch Resistance: Scratch resistant top coating.
 - c. Durability: Top coating contains UV blocking adhesives that increase the lifespan of the print.
 - d. Inks: UV curable.
 - e. Adhesive: UV NPL ultra clear permanent acrylic adhesive.
 - f. Liner: 2 millimeter clear polyester liner.
 - 2. Physical Properties:
 - a. Film: 2 millimeters plus or minus 10 percent.
 - b. Adhesive: 1 millimeter plus or minus 10 percent.
 - c. Liner: 2 millimeters plus or minus 10 percent.
 - d. Weight: 163 grams per square meter.
 - 3. Peel Adhesion:
 - a. Stainless Steel: In accordance with FTM 1.
 - 1) Initial: 12.2 grams per 25 millimeters at 72 degrees Fahrenheit (22 degrees Celsius) and 50 percent relative humidity.
 - 2) 24 Hours: 16.4 grams per 25 millimeters at 72 degrees Fahrenheit (22 degrees Celsius) and 50 percent relative humidity.

- b. Glass:
 - 1) Initial: 13.8 grams per 25 millimeters at 72 degrees Fahrenheit (22 degrees Celsius) and 50 percent relative humidity.
 - 2) 24 Hours: 15.8 grams per 25 millimeters at 72 degrees Fahrenheit (22 degrees Celsius) and 50 percent relative humidity.
- 4. Tensile Strength:
 - a. MD: 96.3 Newtons per 25 millimeters.
 - b. CD: 165.1 Newtons per 25 millimeters.
- 5. Tensile Expansion Rate:
 - a. MD: 98.4 percent.
 - b. CD: 96.3 percent.
- 6. UV Ray Transmission: 5.8 percent.
- 7. Visible Light Transmission: 92.3 percent.
- 8. Shear Resistance: Greater than 650 minutes. Tested in accordance with FTM 8.
- 9. Dimensional Stability: Excellent. Tested in accordance with FTM 14.
- 10. Chemical Resistance: Good (3.5.). Tested in accordance with AATCC 8.
- 11. Standard Flame Spread: 0. Tested in accordance with ASTM E-84. Conforms to NFPA and IBC Class A requirements.
- 12. Smoke Developed: 10. Tested in accordance with ASTM E-84. Conforms to NFPA and IBC Class A requirements.
- 13. Minimum Application Temperature: 40 degrees Fahrenheit (4.5 degrees Celsius).
- 14. Service Temperature Range: -40 to 275 degrees Fahrenheit (-40 to 135 degrees Celsius).
- 15. Customizable Clear Window Printing Techniques:

 SPECIFIER NOTES: DELETE CLEAR WINDOW PRINTING TECHNIQUES NOT REQUIRED FOR THIS PROJECT.

- a. Image Only (No white ink used): Standard printing method. A single artwork layer is printed to the material.
- b. Double Strike (No white ink used): Two artwork layers are printed on top of each other. The increased print density
- c. Image + Spot White: White ink is printed behind parts of the image to intensify the color in specific areas.
- d. Image + Flood White: White ink is printed behind the entire image for a more vibrant color.
- e. White or Black Ink Only: White or blank ink is used for creating image highlights and is also used to emulate frosted glass. Percentages of either color may be printed depending on the level of opacity desired.
- f. Color + White + Color: This technique provides a true-to-color image viewable on both sides of the glass.

 SPECIFIER NOTES: SIZE OPTIONS ARE INDICATED WITH SQUARE BRACKETS. DELETE OPTIONS NOT REQUIRED FOR THIS PROJECT.

- 16. Standard Sizes: [1250 millimeter by 30 meters] or [1560 millimeter by 30 meters] rolls.
- 17. Additional Standards Compliance:
 - a. Conforms to NFPA, IBC, and RoHS regulations.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine Project conditions and completed Work and verify that the substrate is ready to receive CreativeFX™ Custom Window Films.
- B. Ensure all equipment recommended by the manufacturer are readily available for installation.
- C. Ensure temperature and humidity are within the manufacturer's guidelines for installation.
- D. Immediately correct all deficiencies and conditions which would cause improper execution of Work specified in this Section and subsequent Work.

- E. Proceeding with Work specified in this Section shall be interpreted to mean that all conditions were determined to be acceptable prior to start of Work.

3.2 PREPARATION

- A. Film Preparation: Prepare the film in accordance with the manufacturer's recommendations.
- B. Window Preparation:
 - 1. In accordance with the manufacturer's recommendations, ensure the window is completely clean, and free of all loose dirt.
 - 2. Soak the window thoroughly with the application solution.

3.3 INSTALLATION

- A. Adhere to the manufacturer's installation instructions to ensure proper application and adhesion.
- B. Use CreativeFX™ Custom Window Films indoors.
- C. Use CreativeFX™ Custom Window Films within one year of purchase and as early as possible after opening.
- D. Perform wet apply for window applications as recommended by the manufacturer.
- E. Adhere to the manufacturer's recommendations for installation. Ensure ambient and operating temperatures conform to the manufacturer's guidelines.
- F. Adhesive strength may not be achieved fully when installed on a substrate where condensation forms.
- G. Avoid install on window films.
- H. Adhere to the manufacturer's guidelines for installation on various substrates.
- I. Follow the manufacturer's guide lines for release liner removal, film application, film trimming, and final squeegee.

3.4 CLEANING

- A. Adhere to the manufacturer's instructions for Window Film Care and Maintenance.
- B. Do not clean the film for 30 days after installation.
- C. Do not use abrasive cleaning materials or tools that could scratch the film.
- D. Use only soft, clean materials to wash and dry the window film surface.
- E. Do not use harsh chemicals or cleaning agents as these will cause delamination from the window.
- F. Use a soapy water solution such as dish washing fluid and water sprayed into a soft, clean cloth and wipe down the film surface.

END OF SECTION